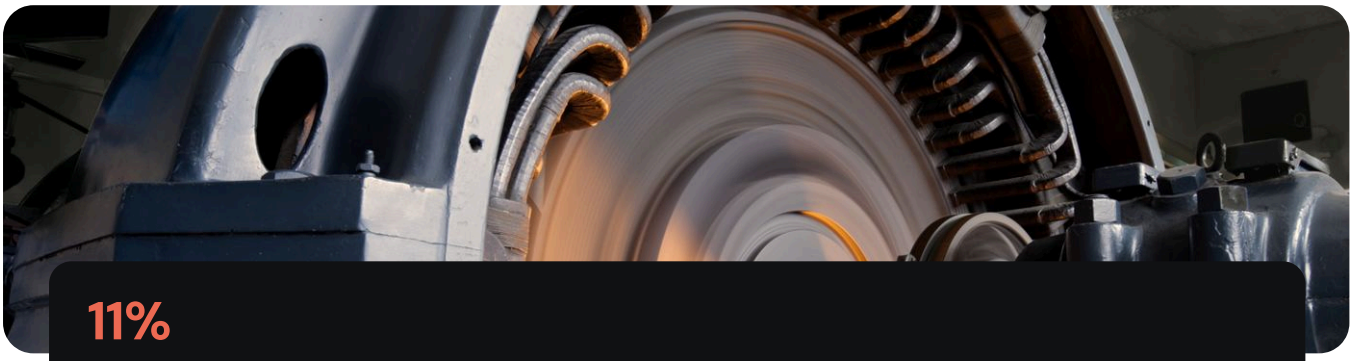
Wind energy · Global

A wind O&M provider regained 11% uptime by stopping repeat turbine alarms

A wind O&M service provider centralized turbine PM, alarm logs and root cause records across its wind farms, so repeating alarms were traced to their causes and fixed.



11%

uptime regained across high-priority turbines

AT A GLANCE

INDUSTRY
Wind O&M services

FLEET
Hundreds of turbines, several makes

LOCATIONS
Multiple wind farms

PREVIOUSLY
No unified alarm or PM log

FEATURES USED
Maintenance · Work · Insight

01 The client

The client is a large wind O&M service provider managing hundreds of turbines across multiple wind farms. The fleet mixes makes and capacities, with nacelle equipment, generators, yaw and pitch systems, gearboxes and hydraulic units.

Its contracts depend on turbine availability, so repeating alarms and reactive downtime cost it directly.

02 The challenge

The same turbine alarms kept coming back. Without one log of alarms and maintenance, nobody could see which turbines failed repeatedly or link alarms to skipped PM.

- Repeated pitch, yaw, generator temperature, hydraulic and sensor alarms.
- Missed lubrication, skipped filter checks and inconsistent torque inspections.
- Technician entries missing root cause data or complete resolutions.
- Spare parts use not linked to alarm recurrence.
- Downtime hurting generation and SLA commitments.

03 What they set up in Asset Infinity

The provider moved turbine maintenance, alarm handling and root cause records for every wind farm into Asset Infinity.

Maintenance

PM aligned to OEM guidelines

Checklists for each turbine model cover nacelle lubrication, hydraulic checks, yaw and pitch inspection, cooling cleaning and anemometer and wind vane checks, with escalation when PM is overdue.

Work

Every alarm on the record

Each alarm is logged against its turbine with time, category, severity and technician notes, so clusters across turbines, farms and components stand out.

Maintenance

Root cause required for repeats

A standard root cause record is mandatory for repeated alarms, covering the alarm chain, conditions, PM status, component condition and spares used.

Insight

Turbine health dashboard

Alarm frequency, downtime, PM compliance, ageing components and high-risk turbines are shown together, so teams start with the turbines costing the most generation.

04 How it works day to day

Here is how alarms and maintenance are handled across the wind farms now.

SYSTEM

Brings in the alarm

A SCADA alarm arrives through the API and is logged against the turbine with its time, category and severity.

SUPERVISOR

Dispatches a technician

The supervisor turns the alarm into a work order and assigns it. The technician is notified in the mobile app.

TECHNICIAN

Records the repair

Photos, vibration data, hydraulic pressure readings and replaced components are entered against the turbine before the job can close.

TECHNICIAN

Completes root cause for repeats

If the alarm has happened before, a root cause record is required: alarm chain, conditions, PM status, component condition and spares used.

SYSTEM

Keeps PM on schedule

Preventive plans raise lubrication, filter and torque work on time and escalate anything overdue to the supervisor.

STOREKEEPER

Issues spares to the job

Parts are issued to the work order, so repeated replacements of the same component are visible.

ENGINEERING TEAM

Targets the worst turbines

Dashboards rank turbines by alarm frequency, downtime and PM compliance, so engineers remove systemic causes first.

05 Before and after

	BEFORE	WITH ASSET INFINITY
Alarm history	No unified log	Every alarm logged against its turbine
Preventive maintenance	Lubrication and filter checks missed	OEM-aligned checklists with escalation
Technician entries	Missing root cause or resolution	Required evidence and root cause records
Spare parts	Not linked to recurring alarms	Issued to each job and traceable
Prioritizing	Hard to see which turbines failed repeatedly	High-risk turbines ranked on a dashboard
Uptime	Lost to repeating alarms	11% regained on high-priority turbines

06 How it rolled out

1

Phased by wind farm. The rollout moved farm by farm, with no interruption to turbine operations.

2

Technicians trained. Teams learned the PM, root cause and alarm workflows in the mobile app.

3

SCADA alarms connected. SCADA alarms were brought into Asset Infinity through the API.

07 The results

- Major drop in repeated alarms thanks to root cause visibility
- Better PM compliance stopped failures linked to skipped checks
- Fewer repeat tasks and emergency trips, lowering service costs
- A complete digital record for audits, OEM claims and SLA reporting
- Clear technician accountability and repair traceability

08 Why it worked

Alarms and PM side by side

Because alarms and maintenance sit on the same turbine record, teams can see when a skipped check led to a fault.

Root cause is required

A repeated alarm cannot close without a root cause record, so fixes address causes rather than symptoms.

One standard for all farms

The same checklists and categories run everywhere, which makes farms comparable and new sites quick to add.

09 Looking ahead

By centralizing preventive maintenance, digitizing alarm logs and making root cause records standard, the provider regained 11% uptime across its high-priority turbines.

The same structure scales. A new wind farm starts with the same checklists, alarm categories and root cause records, so reliability work does not have to be rebuilt site by site.

See it on your own assets

A 30-minute demo, set up for a wind farm owner or O&M provider.

The client's name is withheld for confidentiality. Results are as reported by the client.

Book a demo

Start a 14-day free trial